

**User Manual for**

**Winmate 3.7" Rugged Handheld**

**(R03TACH-RT)**

Winmate Communication INC.

## Revision History

| Version | Description                             | Date       | Author  |
|---------|-----------------------------------------|------------|---------|
| 1.0     | First Released                          | 28.07.2011 | Shin Ku |
| 1.1     | Update                                  | 20.12.2011 | Seven   |
| 1.2     | New add 3.3 "Update WinCE Image to ROM" | 22.03.2012 | Shin Ku |

## **IMPORTANT SAFETY INSTRUCTIONS**

Please read these instructions carefully before using the product and save for later reference.

Follow all warnings and instructions marked on the product.

Unplug this product from the wall outlet before cleaning. Clean the product with a damp soft cloth. Do not use liquid or aerosol cleaners as it may cause permanent damage to the screen.

Do not place this product on an unstable cart, stand, or table. The product may fall, causing serious damage to the product.

This product should be operated from the type of power indicated on the marking label. If you are not sure of the type of power available, consult your dealer or local power company.

Do not allow anything to rest on the power cord. Do not locate this product where persons will walk on the cord.

Never push objects of any kind into this product through cabinet slots as they may touch dangerous voltage points or short out parts that could result in a risk of fire or electric shock. Never spill liquid of any kind on the product.

Do not attempt to service this product by yourself, as opening or removing covers may expose you to dangerous voltage points or other risks and will void the warranty. Refer all servicing to qualified service personnel.

Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:

When the power cord or plug is damaged or frayed.

If liquid has been spilled into the product.

If rainy or water has been exposed to the product.

If the product does not operate normally that the operating instructions are followed. Adjust only those controls that are covered by the operating instructions since improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to normal operation.

If the product has been dropped or the cabinet has been damaged.

If the product exhibited a distinct change in the performance, that indicates a need for service.

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### **Warranty**

Winmate warrants that each of its products will be free from material and workmanship defects for a period of one year from the invoice date. If the customer discovers a defect, Winmate will, at its option, repair or replace the defective product at no charge to the customer, provided it is returned during the warranty period of one year, with transportation charges prepaid. The returned product must be properly packaged in it's original packaging to obtain warranty service.

If the serial number and the product shipping data differ by over 30 days, the in-warranty service will be made according to the shipping date. In the serial numbers the third and fourth two digits give the year of manufacture, and the fifth digit means the month (e. g., with A for October, B for November and C for December).

For example, the serial number 1W08Axxxxxxx means October of year 2008.

### **Customer Service**

We provide service guide for any problem as follow steps : First, visit the website at <http://www.winmate.com.tw> to find the update information about the product. Second, contact with your distributor, sales representative, or our customer service center for technical support if you need additional assistance. You may have the following information ready before you call :

- Product serial number
- Peripheral attachments
- Software (OS, version, application software, etc.)
- Description of complete problem
- The exact wording of any error messages

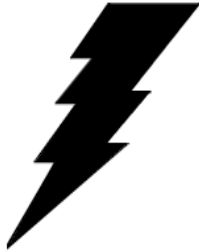
In addition, free technical support is available from our engineers every business day. We are always ready to give advice on application requirements or specific information on the installation and operation of any of our products. Please do not hesitate to call or e-mail us.

### **Notice**

1. Do not touch the LCD panel surface with sharp or hard objects.
2. Do not use abrasive cleaners, waxes or solvents for cleaning, use only a dry or damp, soft cloth.
3. Use only with a high quality, safety-approved, AC/DC power adapter.

## ***Safety Precautions***

- **Warning!**



Always completely disconnect the power cord from your chassis whenever you work with the hardware. Do not make connections while the power is on. Sensitive electronic components can be damaged by sudden power surges. Only experienced electronics personnel should open the PC chassis.

- **Caution!**



Always ground yourself to remove any static charge before touching the CPU card. Modern electronic devices are very sensitive to static electric charges. As a safety precaution, use a grounding wrist strap at all times. Place all electronic components in a static-dissipative surface or static-shielded bag when they are not in the chassis.

### **Packaging List**

This product is shipped with the items list below. Please make sure that all are in your package.

| <b>Item</b>                        | <b>Description</b>                                  | <b>Note</b> |
|------------------------------------|-----------------------------------------------------|-------------|
| <b>Default Packing Accessories</b> |                                                     |             |
| 1                                  | 1 piece of Rugged Handheld.                         |             |
| 2                                  | 1 piece of CD for WinCE BSP & Users Manual.         |             |
| 3                                  | 1 piece of 5V 3A Adapter with Power Plug Connector. |             |
| 4                                  | 1 piece of Battery Built-in                         |             |
| 5                                  | 1 piece of hand strap                               |             |
| 6                                  | 1 piece of Resistive Touch Pen                      |             |

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# Chapter 1 Getting Started

This chapter shows users the first step to use this rugged handheld including an overview of the whole device and an accessory installation guide.

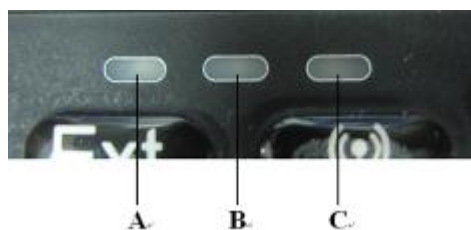
## 1.1 Rugged Handheld Overview

### Front Components



- A. Touch Screen
- B. LED Indicator
- C. Keypad

### LED Indicator



- A. External Function LED
- B. Wireless Function LED
- C. Power Status LED

Keypad



- A. Function
- B. External
- C. Camera
- D. Wi-Fi/ Bluetooth
- E. Enter
- F. Home
- G. Function key(by project)
- H. Power

For more operation instruction, please see Chapter 2 “Navigating the screen”

Back Components



- A. Flash
- B. Camera
- C. Hand Belt Fixing Hole
- D. Speaker
- E. Stylus
- F. Battery Latch Handle

Bottom Connectors



- A. DC Jack
- B. DC Docking
- C. Mini USB
- D. RS232

(Optional) With Barcode Reader



A. Barcode Reader

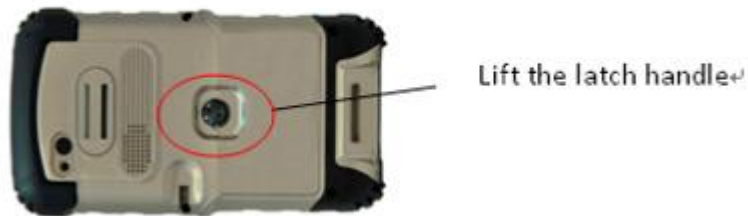
(Optional) RFID



A. RFID

## 1.2 Inserting the SIM Card and Battery

- A. Lift the latch handle of the battery cover and turn it to unlock position. Then, open the cover from the device.



- B. **(Optional)** Users who need 3G function need to install the SIM card provided by mobile operator. With the SIM card chip side facing up, insert the card fully into the bottom slot.



- C. **(Optional)** Users who need to extend memory should install the SD card. With the SD card chip side facing up, insert the card fully into the upper slot.
- D. The first way to install the battery is to attach the upper side of the battery to battery connector and then lower the bottom side to fit into the compartment.



- E. Recover the battery cover and secure the latch by turning it to lock position.

**CAUTION :**

- Need to replace the battery by professional maintenance staff, do not replace the battery by yourself
- Risk of explosion if battery is replaced by an incorrect type
- Dispose of used batteries according to the instructions

## **1.3 Charging the battery**

Before beginning

Make sure the battery is correctly installed in the device.

1. Plug the DC cord of the AC adapter into the power connector of the device.
2. Plug the female end of the AC power cord into the AC adapter and the male end into an electrical outlet
3. The charge indicator glows in amber when charging is in progress. Do not disconnect your device from AC power until the battery is fully charged, as indicated by the amber indicator turning into green. This will take a couple of hours.

When the battery charge level is too low for operation, the device switches itself.

## **1.4 Performing the Initial Startup**

- A. Make sure that your device is either connected to AC power or the battery has power.
- B. Press the power button to turn on your device.  
The backlight of the keypad will light up and, after a few seconds, the setup screen appears.
- C. Follow the on-screen instructions to complete the setup wizard.
- D. After the setup is completed, user can now use the device.
- E. After the setup is completed, user can now use the device.

## Chapter 2 Basic Operations

### 2.1 Navigating around the Screen

There are three ways for users navigating on the screen:

➤ Using Touch screen

The device comes equipped with a stylus—a pointing tool that looks like a pen. The stylus is used to select objects on the touch screen. It is convenient for users to take it from the back of the device.

To choose an icon, open a file, launch an applet or open a folder:

- Double-tap on the appropriate icon.

➤ Using Keypad

The table below shows functions of each key. Some of the keys have different functions when they are under different situations.

| Key Name                                                                                     | Function                           |
|----------------------------------------------------------------------------------------------|------------------------------------|
| Power     | Power ON/OFF                       |
| Home      | Exit program, back to desktop      |
| Enter     | Normal: Confirm                    |
| Wireless  | Wireless enable/disable            |
| Camera    | Camera enable/disable              |
| Phone     | Function key enable/disable        |
| Ext.      | External module enable/disable     |
| Fn        | Enable/disable orange key function |
| 1         | Fn disable: 1                      |
|                                                                                              | Fn enable: Brightness -            |

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|   |                                                                                     |                         |
|---|-------------------------------------------------------------------------------------|-------------------------|
| 2 |    | Fn disable: 2           |
|   |                                                                                     | Fn enable: Up           |
| 3 |    | Fn disable: 3           |
|   |                                                                                     | Fn enable: Brightness + |
| 4 |    | Fn disable: 4           |
|   |                                                                                     | Fn enable: Left         |
| 5 |    | Fn disable: 5           |
|   |                                                                                     | Fn enable: None         |
| 6 |    | Fn disable: 6           |
|   |                                                                                     | Fn enable: Right        |
| 7 |    | Fn disable: 7           |
|   |                                                                                     | Fn enable: Volume -     |
| 8 |    | Fn disable: 8           |
|   |                                                                                     | Fn enable: Down         |
| 9 |    | Fn disable: 9           |
|   |                                                                                     | Fn enable: Volume +     |
| 0 |  | Fn disable: 0           |
|   |                                                                                     | Fn enable: None         |
| * |  | Fn disable: *           |
|   |                                                                                     | Fn enable: None         |
| # |  | Fn disable: #           |
|   |                                                                                     | Fn enable: None         |

## Chapter 3 Using Windows CE 6.0

### 3.1 Start Menu

When this device boots up, the default startup desktop (Windows Classic Shell) is displayed.

Any applications stored in the Startup folder start up immediately.



To access desktop icons:

- Double-tap on the icon to open a window or, in the case of an application icon, launch an application.

On the keyboard:

- Use the arrow keys to highlight the icon and press [ENTER] to launch the highlighted icon.

#### 3.1.1 The Desktop

The icons displayed in the startup desktop operate in much the same way as those displayed on any standard PC desktop that is running Windows.



### **My Device**

Choosing this icon displays the contents of your device.



### **Recycle Bin**

This option temporarily stores items that were deleted, allowing you to either permanently delete or restore these items.



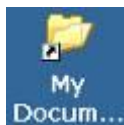
### **Internet Explorer**

Choosing this icon launches Internet Explorer—a standard Windows Embedded CE version. Keep in mind that your supervisor will need to set up access using the Internet Options and the Network and Dial-up Connections icons in the Control Panel.



### **Microsoft WordPad**

WordPad is a basic word processor used to create, edit, and print .rtf, .doc, and .txt files.



### **My Documents**

The My Documents folder is a standard location for storing user-created files. The folder is located under the root of the hard drive on which Windows is installed.

## **3.1.2 Start Programs**

The *Start Menu* lists the operations you can access and work with. It is available from the startup desktop or from within any application.

- To display the menu, tap on the *Start Menu*.

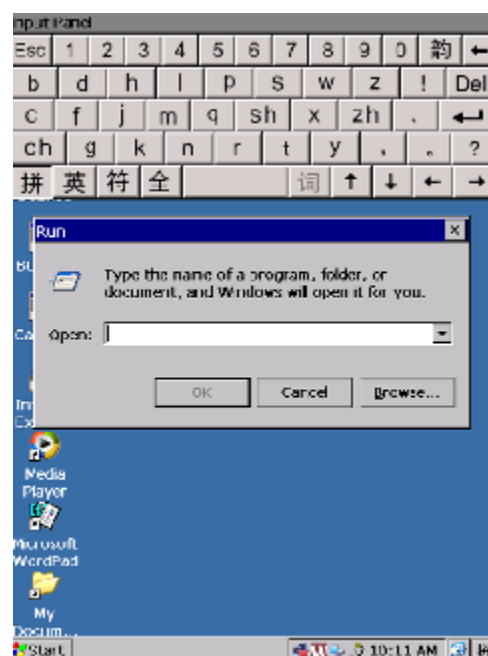
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#### 3.1.2.1 Run

Choosing the *Run* option from the *Start Menu* displays a dialog box in which you can enter the name of the program, folder or document you want to open or launch.



### 3.1.2.2 Setting

The **Settings** sub-menu includes the following settings: Control Panel, Network and Dial-up Connections and Taskbar and Start Menu.



#### Control Panel

The *Control Panel* contains applets used to configure hardware, the operating system and the shell.

#### Network and Dial-Up Connections

The *Network and Dial-up Connections* window allows you to configure the handheld network interfaces or execute an existing configuration.

#### Taskbar and Start Menu

The *Taskbar and Start Menu* option displays a dialog box in which you can customize the taskbar, choosing which options will be displayed.

### 3.1.2.3 Documents



### 3.1.2.4 Favorites

Favorites include the web links that users save for convenience.



### 3.1.2.5 Programs

Choose **Programs** to display a sub-menu of options. The programs displayed will be those residents in the *Windows\Programs* folder of the computer.



This sub-menu allows you to choose *Camera*, *Command Prompt*, *Internet Explorer*, *Media Player*, installed applications (e.g., Microsoft WordPad), *RegEdit*, *RFID\_Barcode\_Reader*, *TestTool* and *Windows Explorer*.

#### Camera

*Camera* can only support pre-view now.

#### Command Prompt

*Command Prompt* is used to access the DOS command prompt. At the prompt, you can type DOS commands such as *dir* to display all the directories in the drive.

#### Internet Explorer

3.7" Handheld is equipped with Microsoft Internet Explorer for Windows Embedded CE. You can access the *Internet Options* icon through the *Start Menu* under *Settings>Control Panel* or by double-tapping on the desktop icon *My Device* and then, double-tapping on the *Control Panel* icon.

#### Media Player

The installed Media Player can play video files.

### **Microsoft WordPad**

*WordPad* is a basic word processor used to create, edit, and print *.rtf*, *.doc*, and *.txt* files.

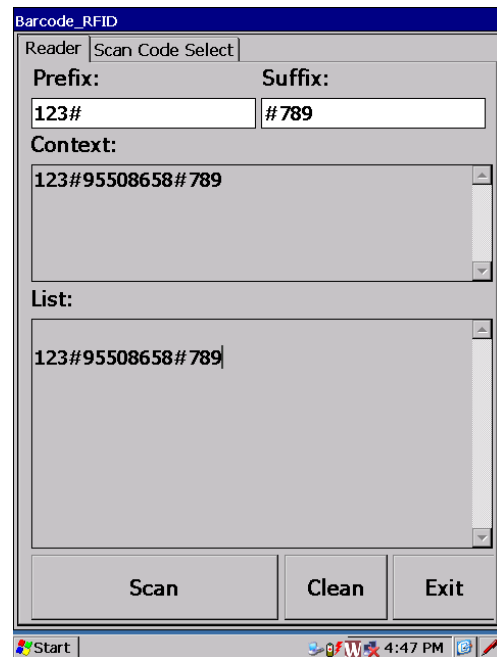
### **RegEdit**

*Regedit* To revise registry setting via regedit.exe

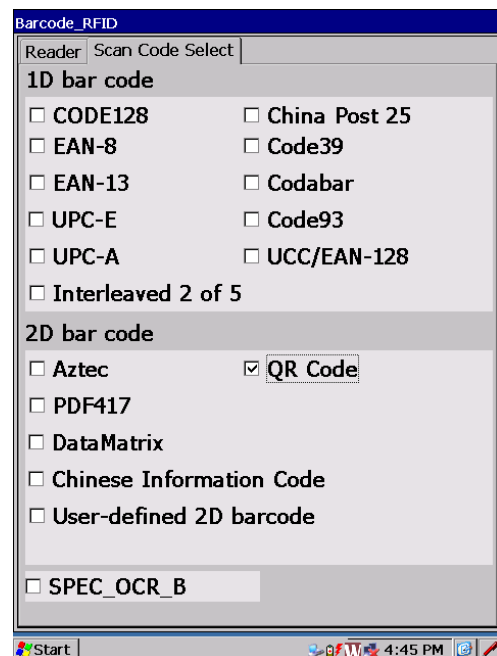
## RFID\_Barcode\_Reader

The program can test value of RFID or Barcode Reader.

Customized prefix and suffix can be set and then will be shown in the list after users scan.



Various type of linear or matrix barcode can be selected.

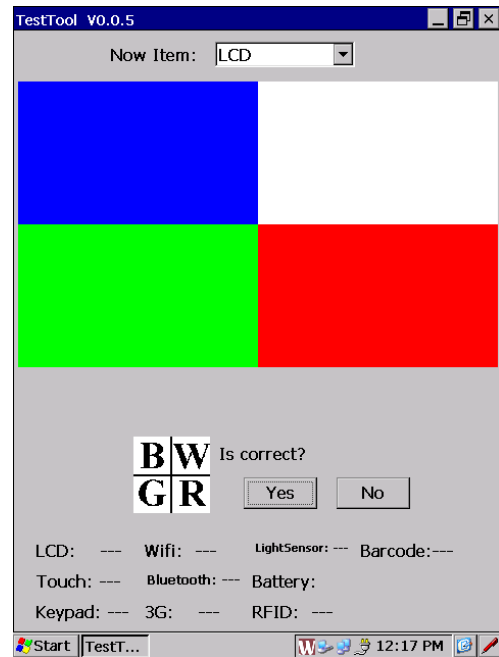


## Test Tool

The tool is for test all of the functions.

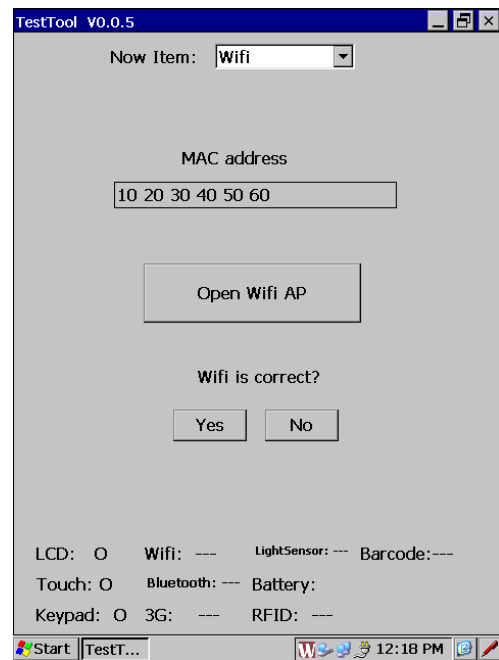
### LCD

Test if the colors, blue/ white/ green/ red, are shown normally.



### Wi-Fi

To check if MAC address and Wi-Fi work normally

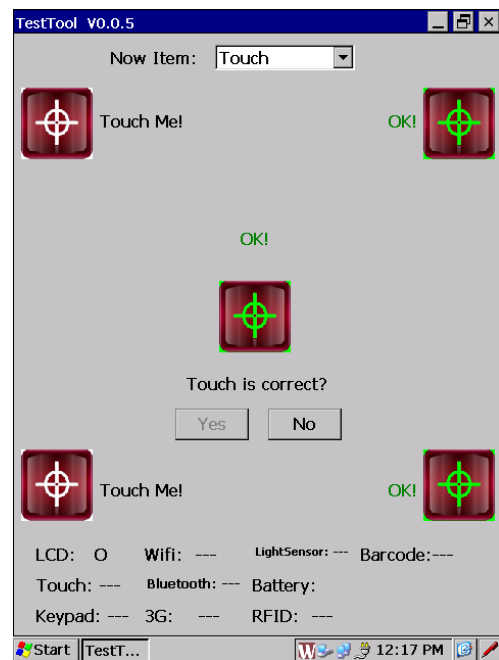


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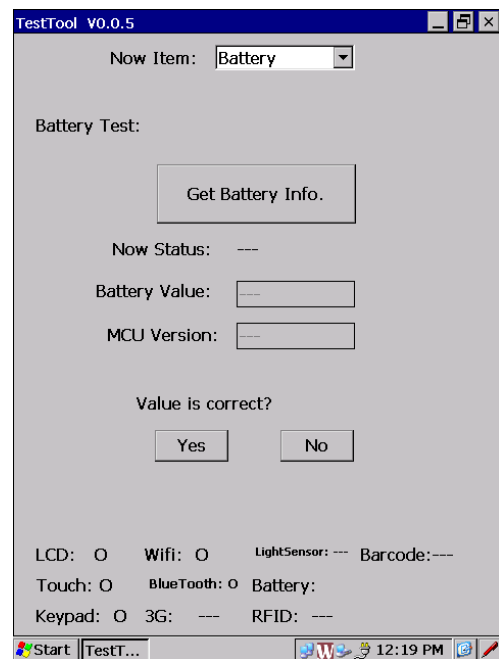
#### Touch

To test if touch function is normal



#### Battery

To examine power status and value, and confirm MCU version

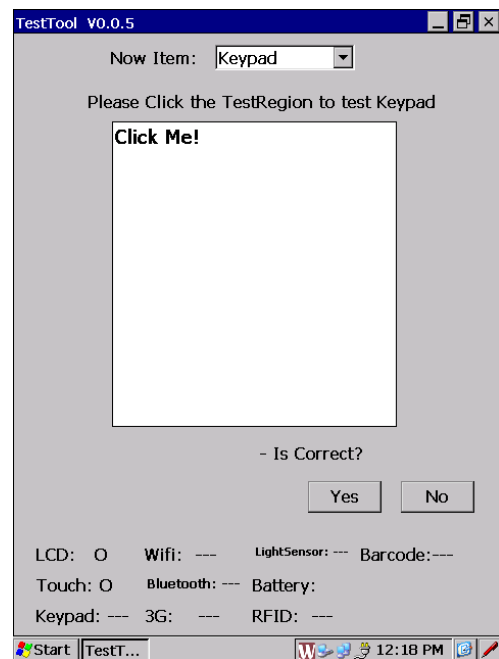


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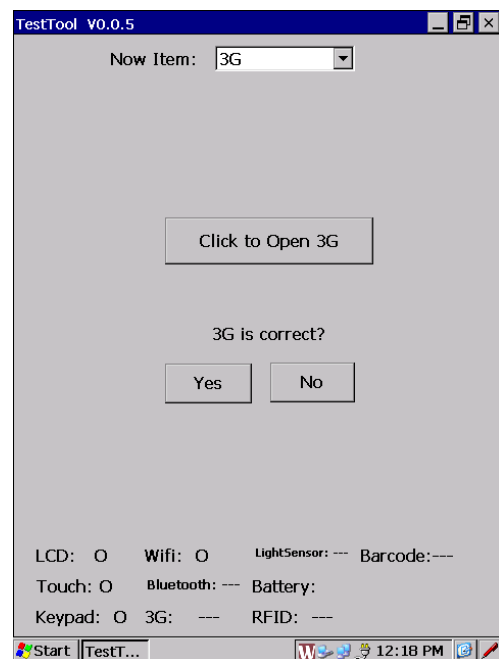
#### Keypad

Test each key is correct or not. When press one certain key, the screen will show its corresponding function.



#### 3G

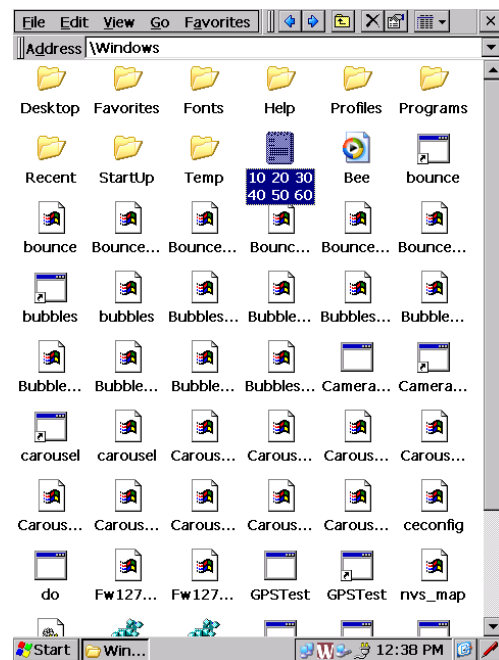
To check if 3G function is normal



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After test is done, users can check Logo file within “My Device→Windows”. The default file is named as “MAC Address.”



## Windows Explorer

The Windows Explorer installed on your 3.7" Handheld is consistent with all Windows Embedded CE devices.

### 3.1.3 Taskbar

The taskbar at the bottom of the screen displays a variety of system status indicators, including the Input Panel button if you have chosen to show that option in the *Taskbar and Start Menu* settings.



The taskbar changes dynamically, and only those icons that are applicable are displayed. For example, if a radio is not installed in your device, the radio signal icon is not displayed in the taskbar.

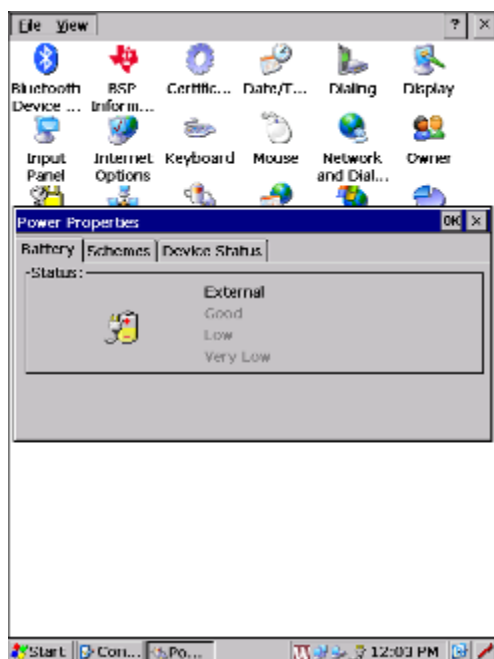


#### **Battery**

The battery shaped icon displayed in the taskbar provides quick access to the charge state of the battery. Tapping on the icon once will show the percentage of power left in the battery.

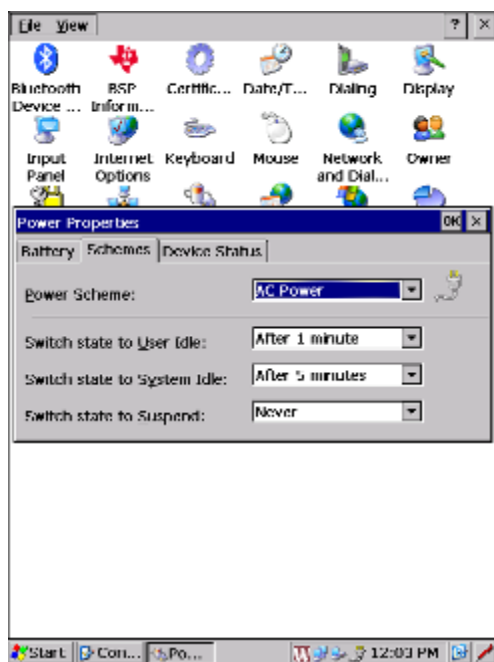
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## Scheme

To set up power scheme and state



## AP Settings

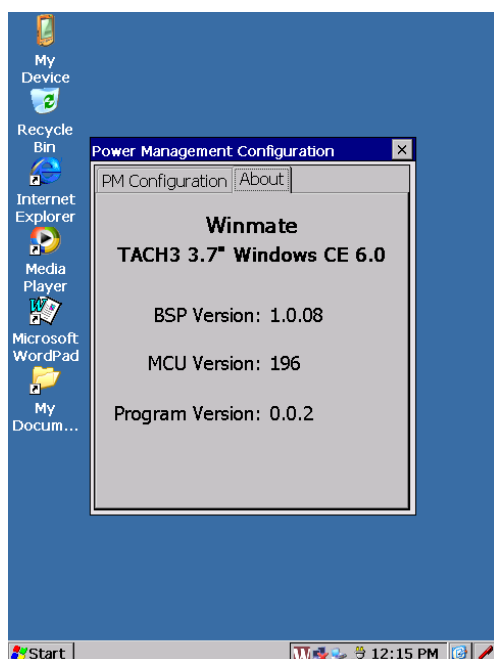
- 1) Low Battery Warning: Users can set up low battery warning level.
- 2) GPS/ Wi-Fi default status setup

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To check version of OS and MCU



This icon displayed in the taskbar represents the installed *Wireless LAN*.



This icon shows current time.

**ShungPin IM 3D (for MSPY3)**

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#### 3.1.4 Keypad

##### 3.1.4.1 Function Key

Function Key is used to facilitate to apply more functions for users. After function key is pressed, some keys have different functions from number functions. For example, the specific keys can be used to adjust brightness and volume. When function key is activated, there is a mark shown in top right as below.

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#### 3.1.4.2 ESC/ EXT

The ESC/ EXT key is used to enable Barcode reader/ RFID function.

#### 3.1.4.3 Wireless LAN

When taping Wireless LAN key, the window showing Wi-Fi information will appear.

#### 3.1.4.4 Camera

The Camera key can activate camera function.

#### 3.1.4.5 Enter

Users can confirm their actions by pressing the Enter key

#### 3.1.4.6 Home

Home key is a shortcut to show start screen.

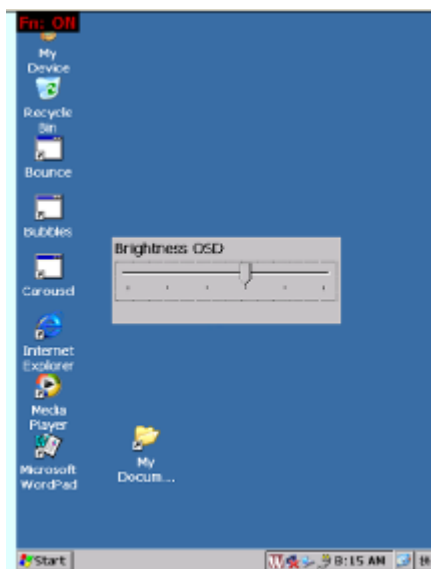
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**3.1.4.7 Backlight-**

Backlight- can be activated after users press Fn  key.

Step:  > 



Brightness has been decreased.

**3.1.4.8 Backlight+**

Backlight+ can be activated after users press Fn  key.

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Step:  > 



Brightness has been increased.

#### 3.1.4.9 Sounds-

Sound- can be activated after users press Fn  key.

Step:  > 



#### 3.1.4.10 Sounds+

Sound- can be activated after users press Fn  key.

Step:  > 



#### 3.1.4.11 Power

To turn on and turn off the device

## 3.2 Device

### 3.2.1 Wi-Fi Function

The *Wi-Fi* application is used to configure the 3.7" Handheld 802.11b/g radio for one or more wireless network profiles. A network profile contains settings for SSID (Service Set Identifier) and security options.

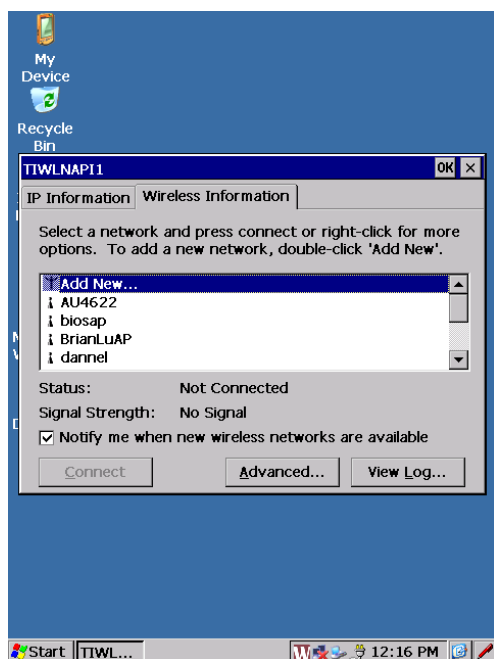
#### 3.2.1.1 How to activate and inactivate Wi-Fi

When the device boots up, the Wi-Fi screen is automatically displayed. In addition,

users can press Wireless LAN  key to start the same function.

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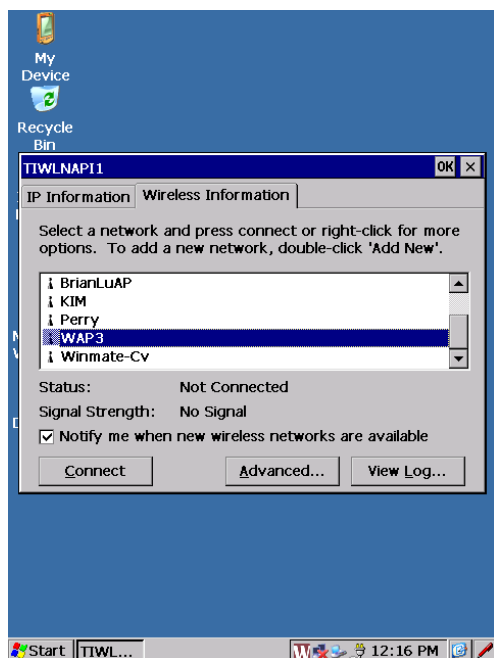
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The *Wi-Fi* screen is displayed.

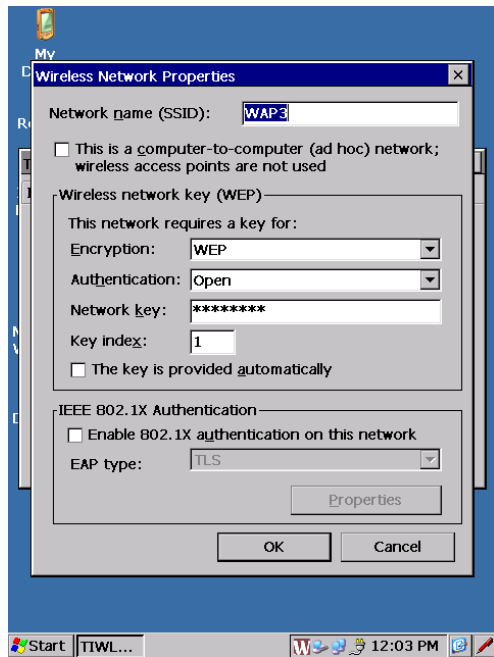
Tap “Wireless Information” tab

This tab displays existing networks to which you can connect, and it allows you to add a new network or modify the settings for an existing network.



- **Connect** button: To force connection to a specific, existing network, highlight the network to which you want to connect, and tap on the **Connect** button and a “Wireless Network Properties” tap jumps.

## Wireless Network Properties



- **Ad Hoc And Infrastructure:** If you are using an *Infrastructure* network—one in which the handhelds must pass data through an access point—leave the checkbox next to *This is an ad hoc network* blank.

If you are using an *Ad Hoc* network—a network in which the handhelds pass data directly to other Ad Hoc devices without an access point—add a checkmark in the checkbox next to *This is an ad hoc network* to enable Ad Hoc.

- **Encryption:** *WEP* (Wired-Equivalent Privacy) encryption prevents others from accidentally accessing your network. If you are not using encryption, you can choose *Disabled* from the drop-down encryption menu. Otherwise, leave this field as is. *AES* (Advanced Encryption Standard) is a standard for protecting data through encryption.

AES supports key sizes of 128 bits, 192 bits and 256 bits and will serve as a replacement for the Data Encryption Standard (DES), which has a key size of 56 bits. In addition to the increased security that comes with larger key sizes, the AES algorithm is a symmetrical block cipher that can encrypt (encipher) and decrypt (decipher) information.

- **Authentication:** 802.11 support several subtypes of network authentication services:

*Open*, *Shared*, *WPA*, and *WPA-PSK*. Under *Open* authentication, any wireless station can request authentication. The station that needs to authenticate with another wireless station sends an authentication management frame that contains the

identity of the sending station. The receiving station then sends back a frame that indicates whether it recognizes the identity of the sending station.

Under *Shared* authentication, each wireless station is assumed to have received a secret shared key over a secure channel that is independent from the 802.11 wireless network communications channel.

Under *WPA* and *WPA-PSK* authentication, the use of 802.1x authentication is required.

For wireless networks *without* a Remote Authentication Dial-In User Service (RADIUS) infrastructure, WPA supports the use of a preshared key. For wireless networks *with* a RADIUS infrastructure, Extensible Authentication Protocol (EAP) and RADIUS is supported.

- **Network Key:** This text box is used to specify a 5 or 13 ASCII character sequence or an equivalent 10 or 26 Hexadecimal digit sequence that matches the active WEP key on the access point.

To assign a *Network key*, highlight **The key is provided automatically**, and *uncheck* the checkbox to disable this option.

- **Enable 802.1x authentication:** 802.1X is the IEEE standard that offers additional security for local area networks. It provides authentication for user devices attached to an Ethernet network, whether wired or wireless. A security protocol packet such as TLS or MD5 encapsulated in an *EAP* is used in conjunction with the 802.1X standard to authenticate users at the MAC layer. Available EAPs are listed in the drop-down menu next to the *EAP* option.

To activate 802.1X, highlight **802.1x authentication**, and check the checkbox.

- **EAP Type (Extensible Authentication Protocol):** This drop-down menu lists the EAP types available on your system. The items in this drop-down menu will vary depending on your network setup. Keep in mind also that some authentication protocols require that you select a Certificate. By selecting the *Properties* button, you will be able to select a *Certificate*. “Certificates” on page 88 provides a website that outlines how to create certificates for your network.

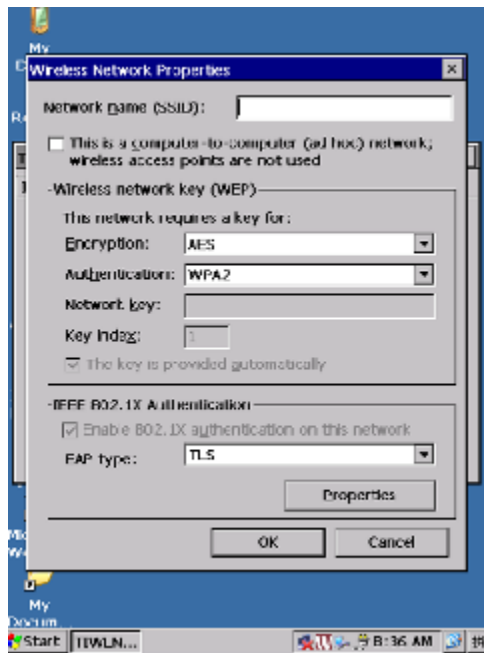
- **Saving and exiting the radio setup:** Once you have completed the configuration,

press [ENTER], or tap on OK.

The connection you created will be listed in the *Wireless Information* tab as a preferred network. The radio will search for the SSID and compare the WEP and authentication information you specified. If there is a match between the hand-held settings and the access point settings, the hand-held will communicate on the network through the access point.

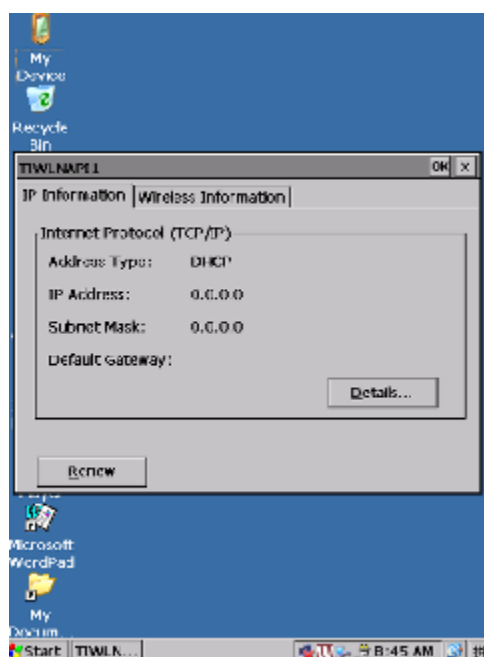
### **When there is no available or suitable network**

- To add a new configuration, tap on the **Add New** button. A blank *Wireless Properties* dialog box is displayed.



- Type the appropriate SSID (Service Set Identifier) in the **Network name (SSID):** dialog box. The *Network name* field can contain a maximum of 32 characters. The name assigned here is listed as a preferred network.

### 3.2.1.2 Check IP Information/ Wireless Information

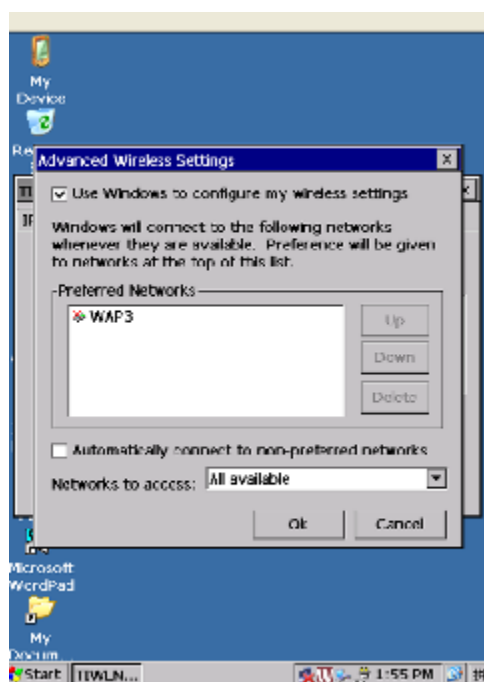


### 3.2.1.3 Advanced settings

To display the *Advanced Wireless Settings* dialog box:

- Tap on the *Advanced* button in the Wireless Information tab.

This window lists the available preferred networks.



### Rearranging Preferred Networks

3.7" Handheld attempts to connect with the networks listed in this dialog box in sequence, beginning at the top of the list. If you need to rearrange this list of networks—move networks up and down in the list:

- Tap in the *Networks List*, and highlight the **network** that you want to move up or down in the list.
- To move the highlighted item in the list upward or downward, tap on the **Up** or **Down** button.

### Deleting A Preferred Network

To delete a network from this list:

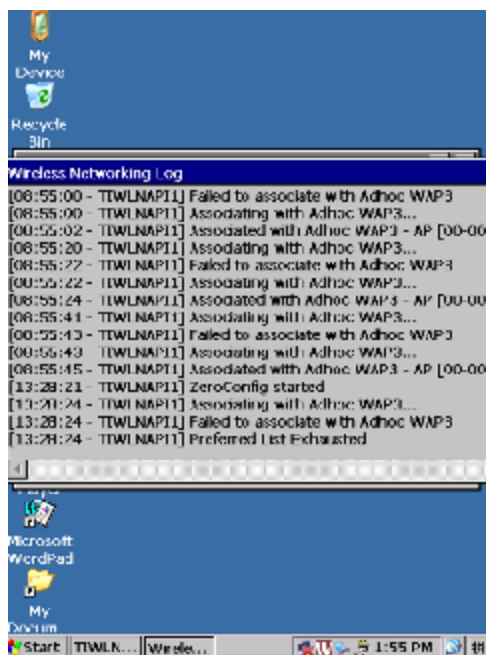
- In the *preferred networks* list, highlight the **network** you want to remove.
- Tap on the **Delete** button.

### Changing Network Properties

To change the properties of an existing preferred network:

- Highlight the **network** that you want to modify.
- Tap on the **Properties** button.
- Make any necessary changes in the *Wireless Properties* dialog box and press **[ENTER]** to save the changes.

#### 3.2.1.4 View Log



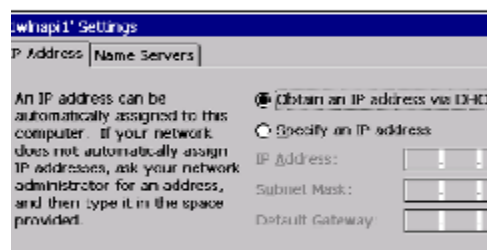
### 3.2.1.5 IP Address setting

To assign an *IP address* for your device:

Tap on **Start>Settings>Network and Dial-up Connections**. Tap on the **radio icon** for which you want to assign an IP address—in the sample screen below, the icon is labeled **TIWLNAPI1**.



The *Wireless Statistics* screen is displayed.

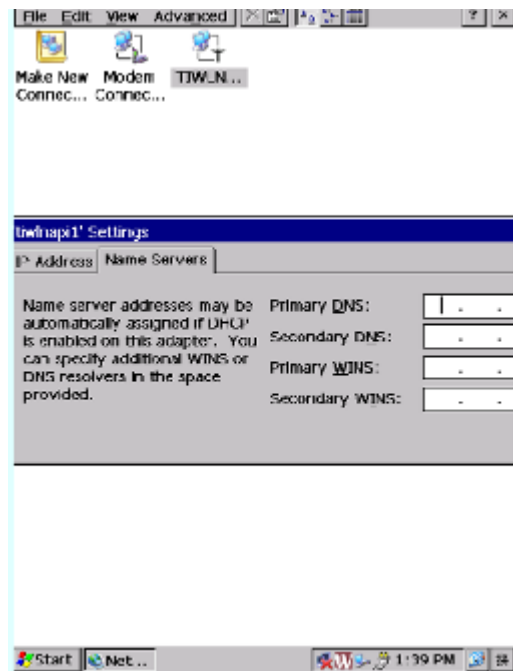


Tap on the radio button next to **Specify an IP address** to select it.

- Type an **IP**, **Subnet Mask** and **Default Gateway** address in the appropriate fields.
- Press **[ENTER]** to save your information.

### 3.2.1.6 Name Servers

- In the *TIWLNAPI1* IP Information tab, tap on the **Configure** button.
- Tap on the **Name Servers** tab.



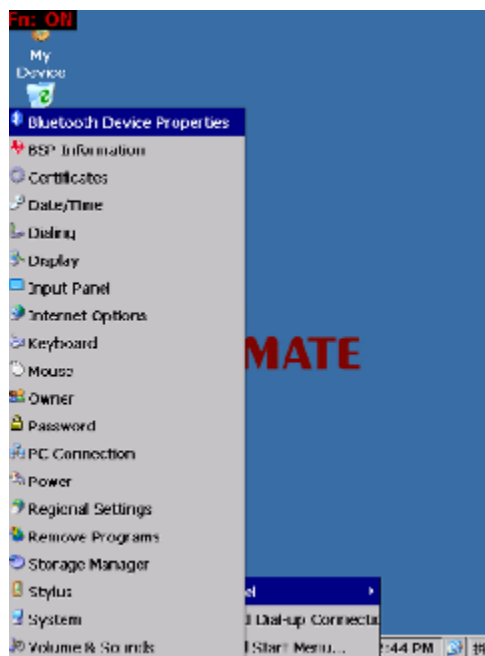
The DNS and WINS fields in the *Name Servers* tab allow you to specify additional WINS and DNS resolvers. The format for these fields is ###.###.###.###.

## 3.2.2 Bluetooth

*Bluetooth* is a global standard for wireless connectivity for digital devices and is intended for Personal Area Networks (PAN). The technology is based on a short-range radio link that operates in the ISM band at 2.4 GHz. When two *Bluetooth*-equipped devices come within a 10 metre range of each other, they can establish a connection. Because *Bluetooth* utilizes a radio-based link, it does not require a line-of-sight connection in order to communicate.

### 3.2.2.1 How to activate and inactivate Bluetooth

*Start > Settings > Control Panel > Bluetooth Device Properties*



The Bluetooth Manager screen displays.



In this tab, users can discover and display *Bluetooth* devices.

#### **Discovering and Removing Devices**

*Scan* discovers *Bluetooth* devices in range of your device and lists them in this tab.

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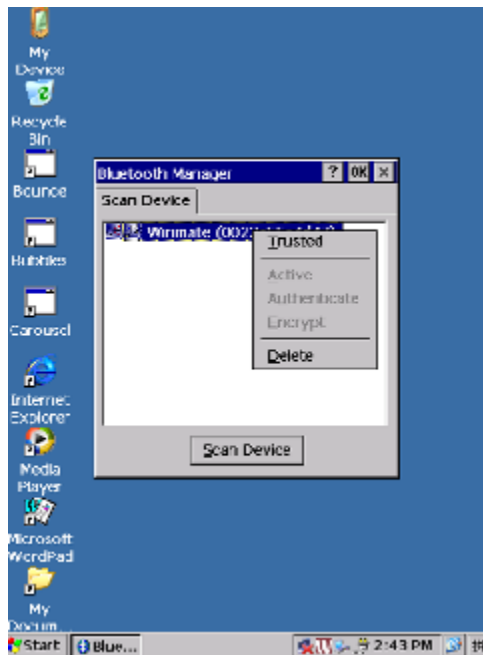
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Any existing devices previously discovered and listed will also be displayed.

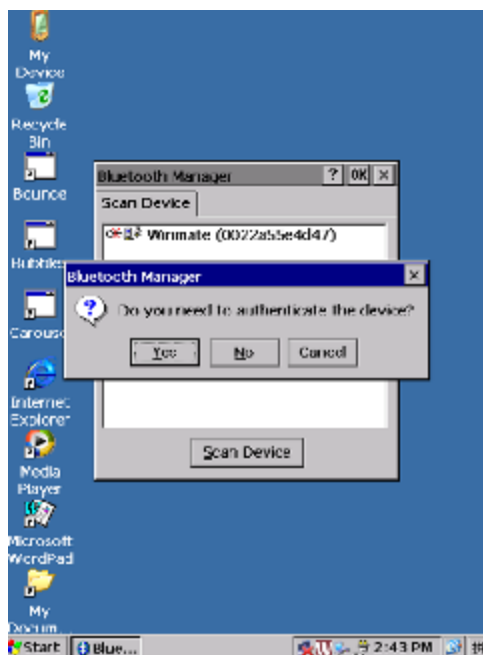
*Clear* removes all *Bluetooth* devices listed except those with currently paired and connected services.

#### 3.2.2.2 Trusted and Active Device

Tap the selected item twice and a trusted window appears.



Tap "Trusted" and a confirmation window jumps.

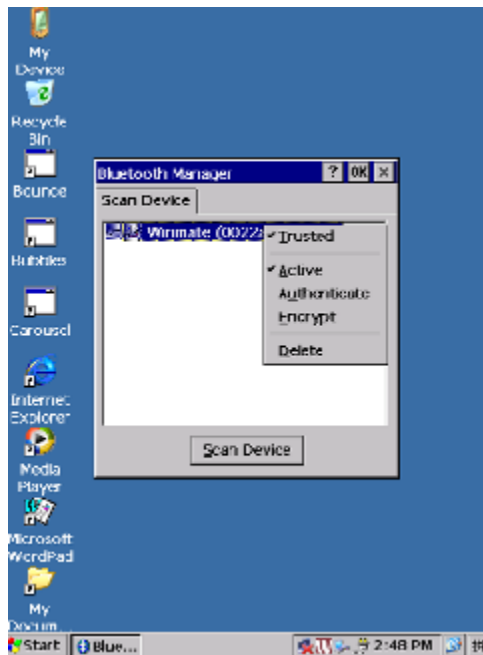


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Enter your customized PIN



When the other device accepts the match invitation and enters the right PIN, the Bluetooth is activated.



### 3.2.3 GPS

This applet allows you to define how the GPS module operates. You can determine when the GPS module is powered and operating, and choose from a set of GPS profiles built into the modem.

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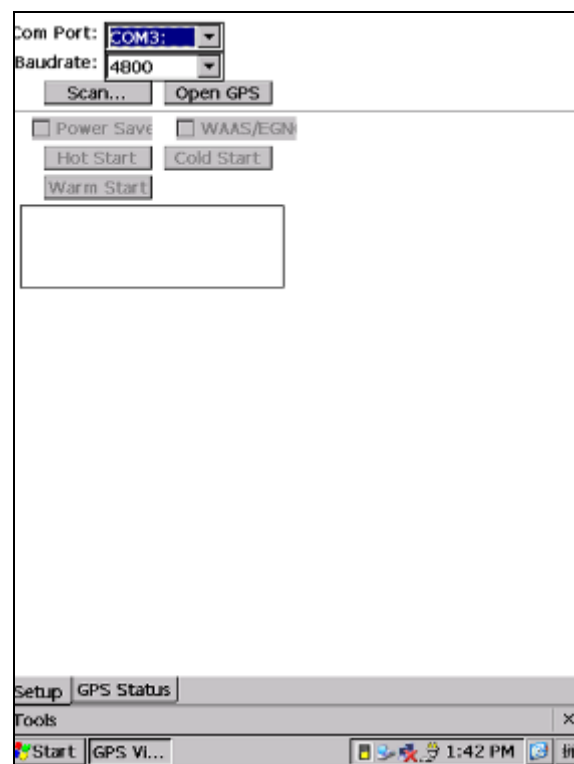
**3.2.3.1 How to activate and inactivate GPS**

Tap on Start>Programs>mGPSCmd

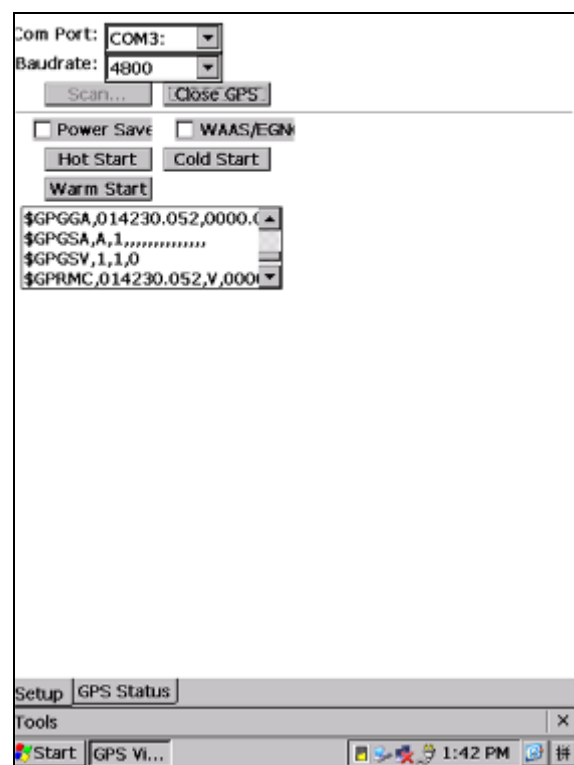


### 3.2.3.2 GPS Setting

Choose "COM3" for Com Port and "4800" for Baudrate

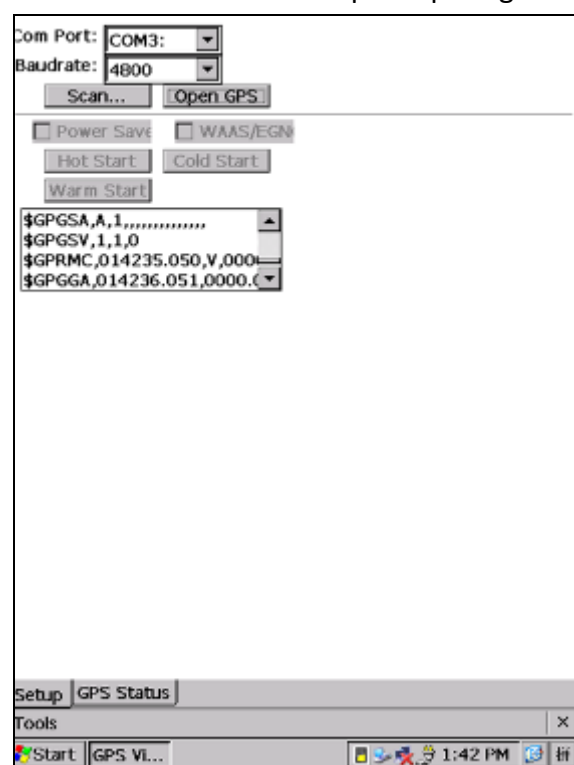


Click "Open GPS" and GPS values will start to be read.



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Click" Close GPS" to end up computing



## 3.2.3.3 Check GPS status



### 3.2.4 3G Module

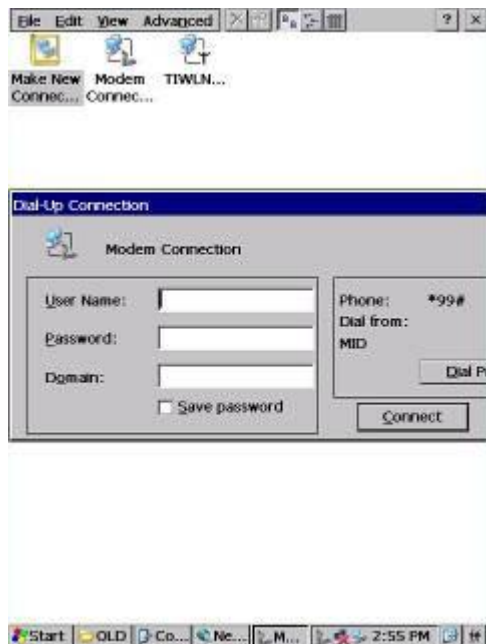
#### 3.2.4.1 How to activate and inactivate 3G module

Tap on Start> Settings> Control Panel> Network and Dial-up Connection



Tap on Start> Settings> Network and Dial-Up Connections  
Select "Modem Connection" icon

### 3.2.4.2 Make new connection



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#### 3.2.4.3 Modem dial-up connection



### 3.2.5 RFID (Optional)

Tap on *Start> Programs> Serial\_Port\_Test*



Click “Open” tab to start calculating and the value will be in Receiver Zone.

### 3.2.6 Barcode Reader (Optional)

Tap on *Start> Programs> Serial\_Port\_Test*



Click “Barcode” tab to start calculating and the value will be in Receiver Zone.

## 3.3 Update WinCE Image to ROM

### 3.3.1 Note

1. Format Micro SD card to **FAT32**.

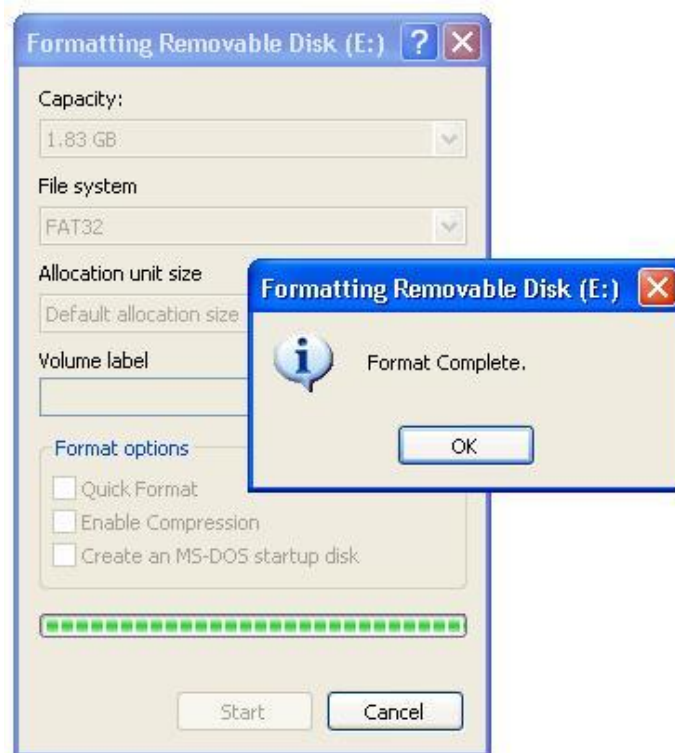


Figure 1

2. Make sure the Micro SD card is **cleanly**.

### 3.3.2 Steps

1. Go to the image folder and find the file “**MLO**” and copy it to Micro SD card.

✂The “MLO” must be the **first** file what you copy it to Micro SD card.

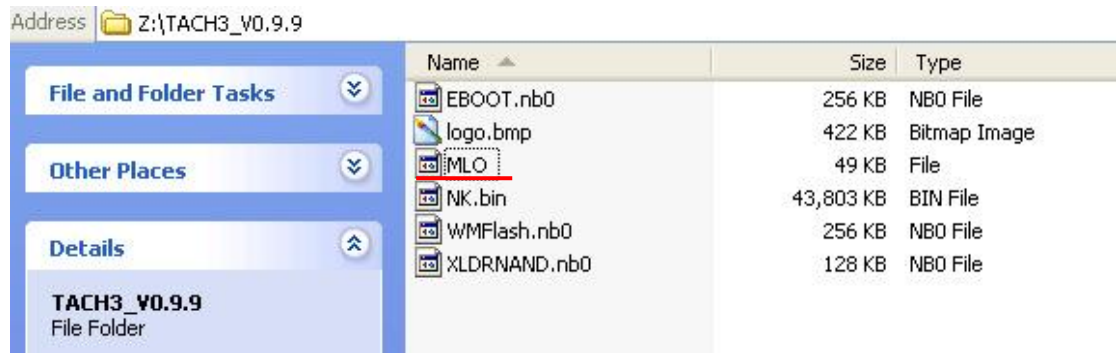


Figure 2

2. Find the file “**WMFlash.nb0**” at the image folder and copy it to Micro SD card.

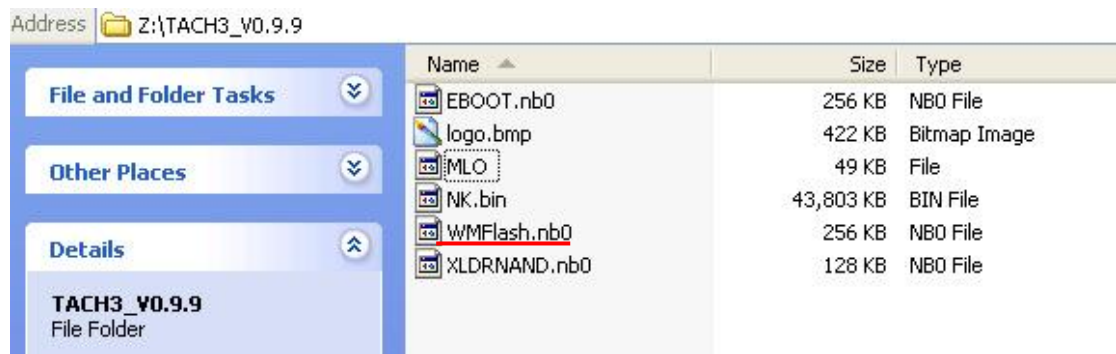


Figure 3

3. Find the file “**logo.bmp**” at the image folder and copy it to Micro SD card.

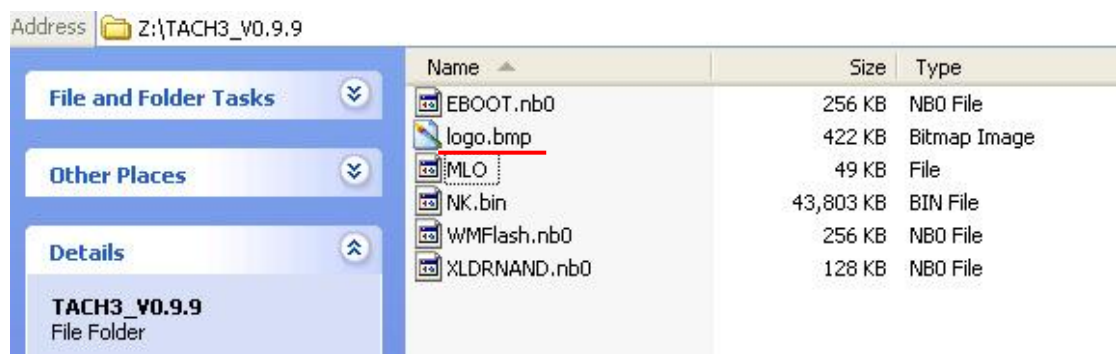


Figure 4

4. Find the file “**XLDRNAND.nb0**” at the image folder and copy it to Micro SD card.

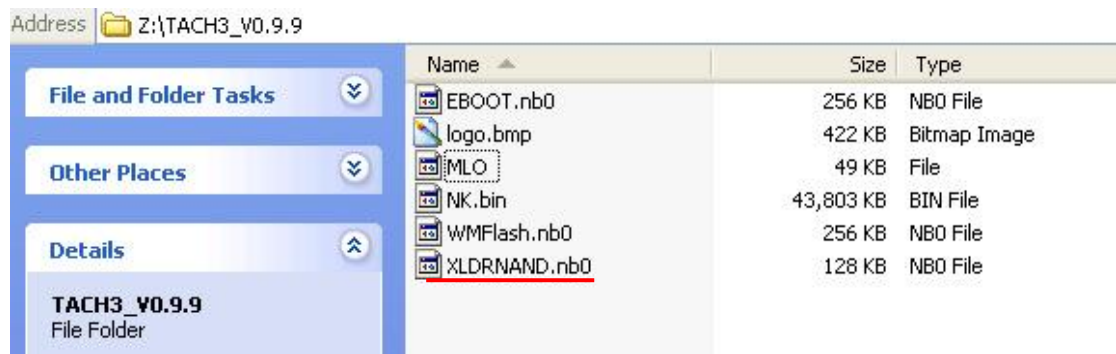


Figure 5

5. Find the file “**EBOOT.nb0**” at the image folder and copy it to Micro SD card.

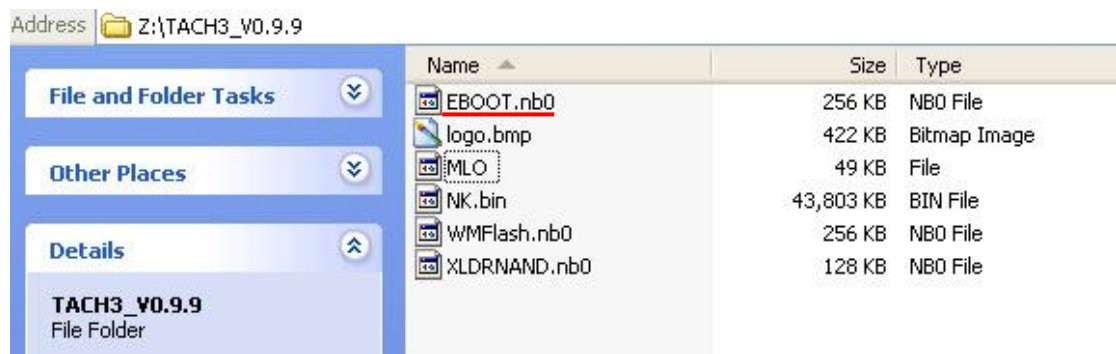


Figure 6

6. Find the file “**NK.bin**” at the image folder and copy it to Micro SD card.

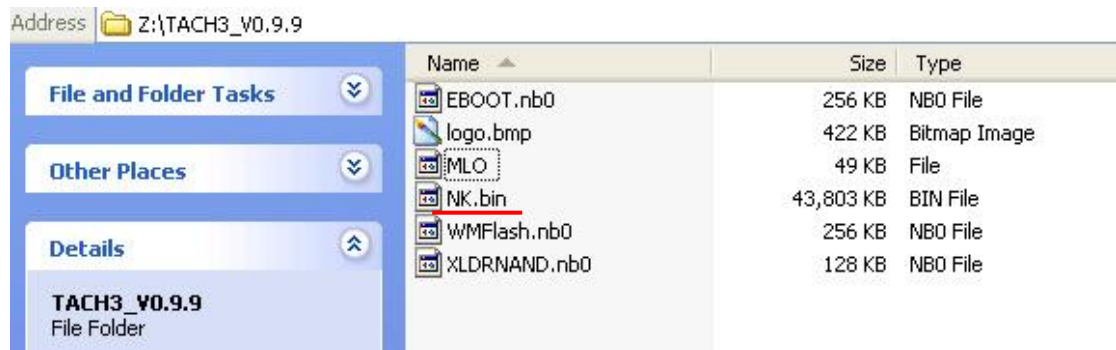


Figure 7

7. You will see the image like Figure 8 from Micro SD card after you done step 1 to 6.

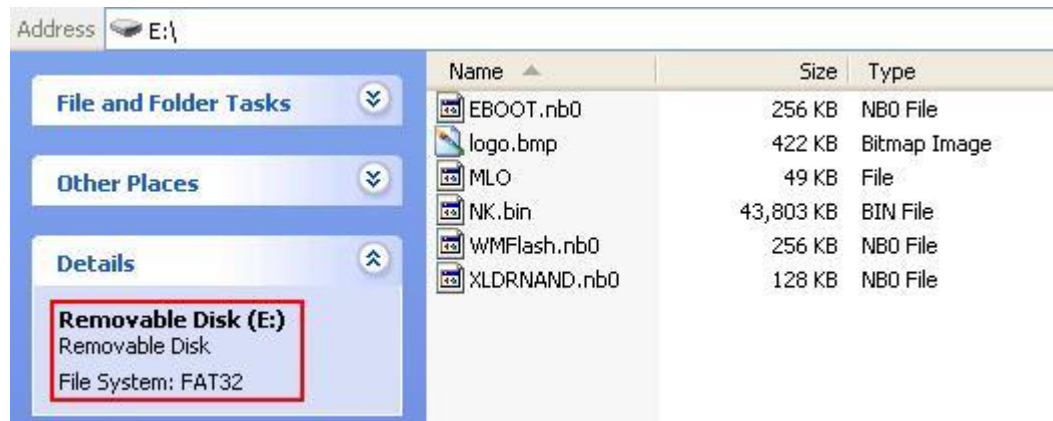


Figure 8

※At WinCE in TACH3

8. Double click “My Device”

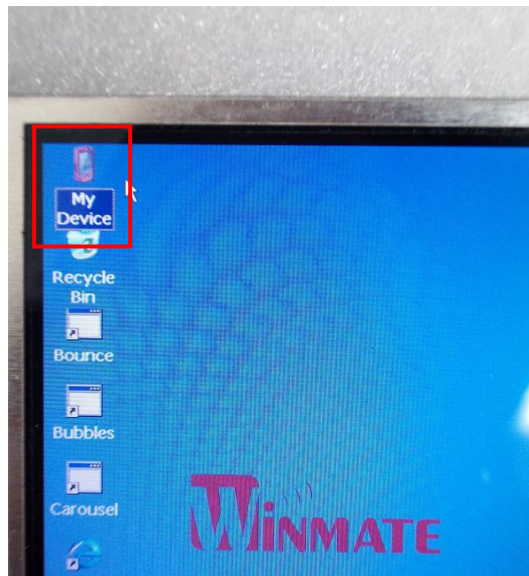


Figure 9

9. Double click “Control Panel”, and execute “Storage Manager”

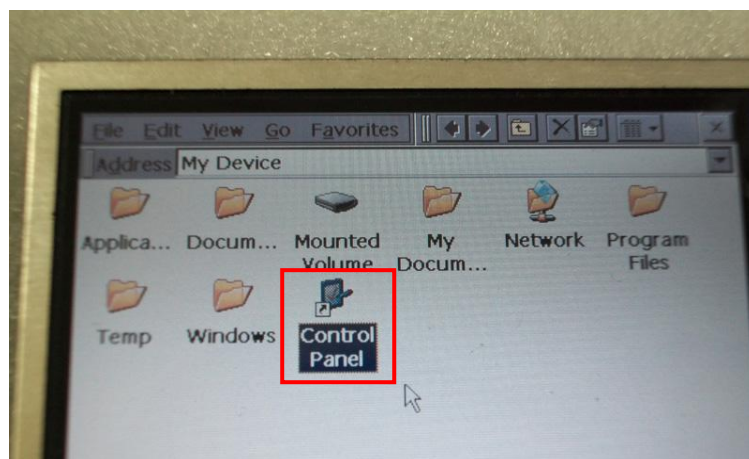


Figure 10

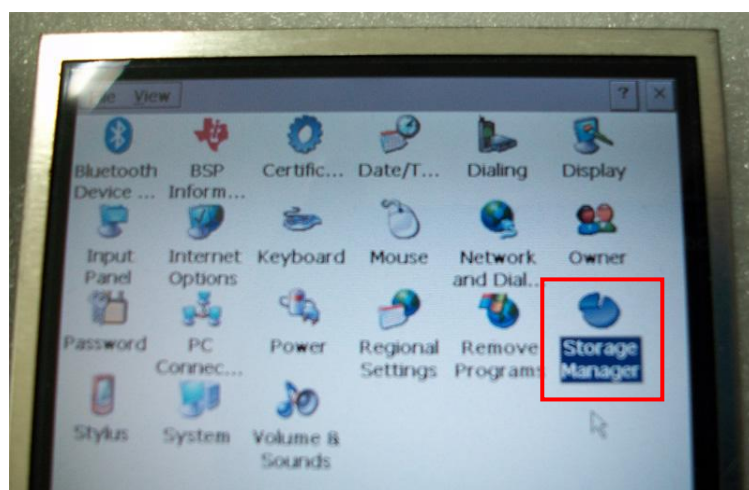


Figure 11

10. Click "Dismount" button when you see the image like Figure 12.

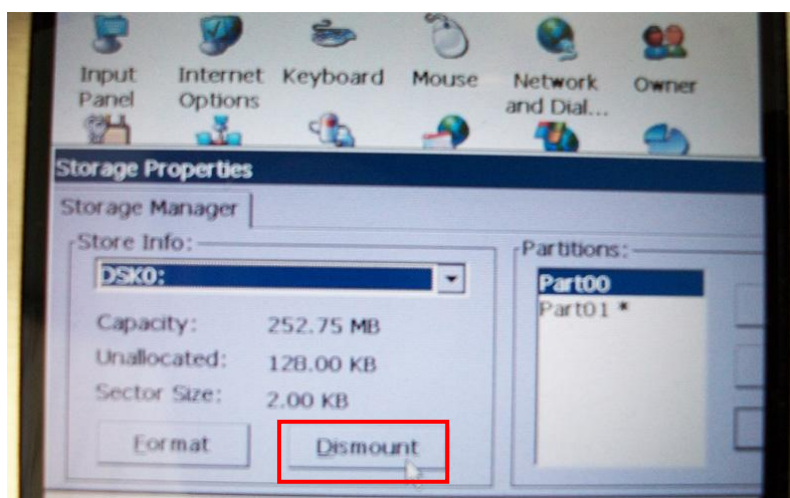


Figure 12

11. Click “Format” button and select “OK”

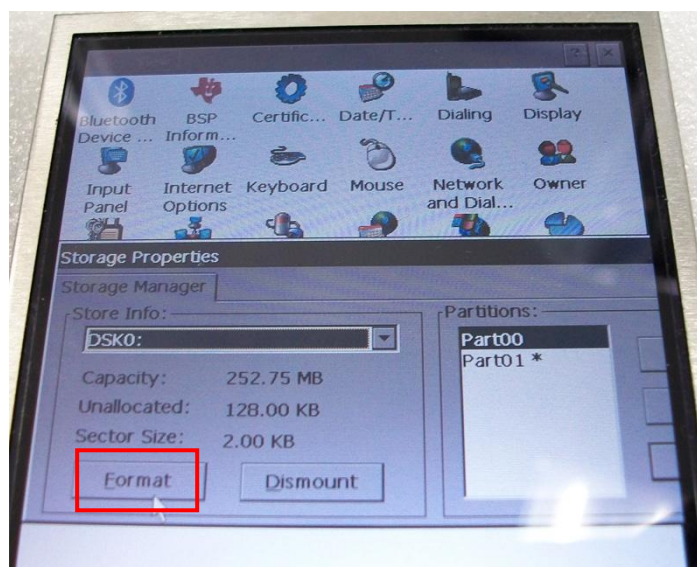


Figure 13

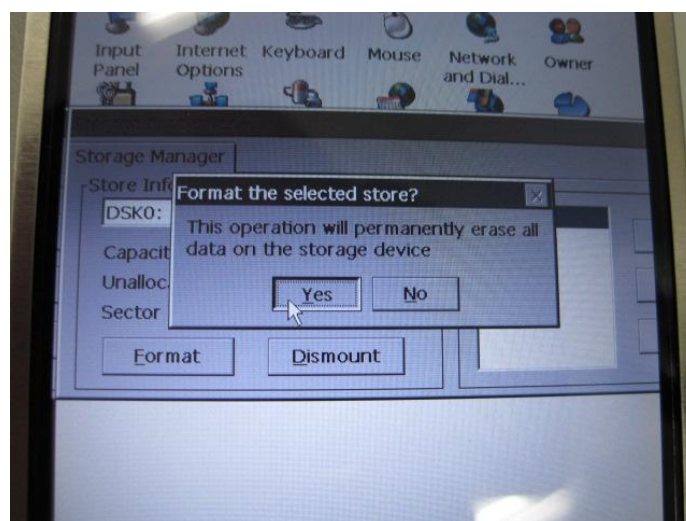


Figure 14

12. When the screen shows a image like Figure 15, please power off TACH3

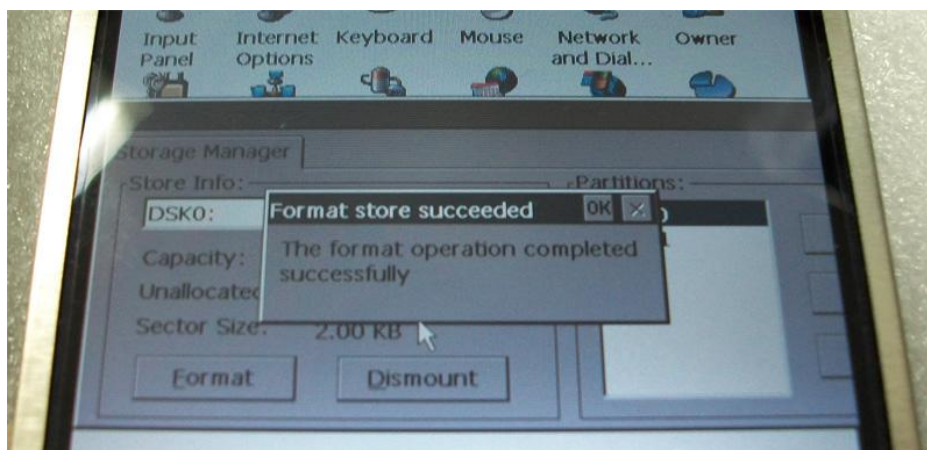


Figure 15

13. Plug the Micro SD card in the TACH3 and power **on**.
14. The TACH3 screen will show a boot logo like Figure 16 and **start to erase** ROM.



Figure 16

15. About 20 seconds later, it will show an image like Figure 17.  
It means the erase function finishes. Then re-start TACH3.



Figure 17

16. The screen will show an image like Figure 18, and it will start to format ROM.  
After 15 seconds, the image will change to another like Figure 19, and the WinCE image is flashing now.

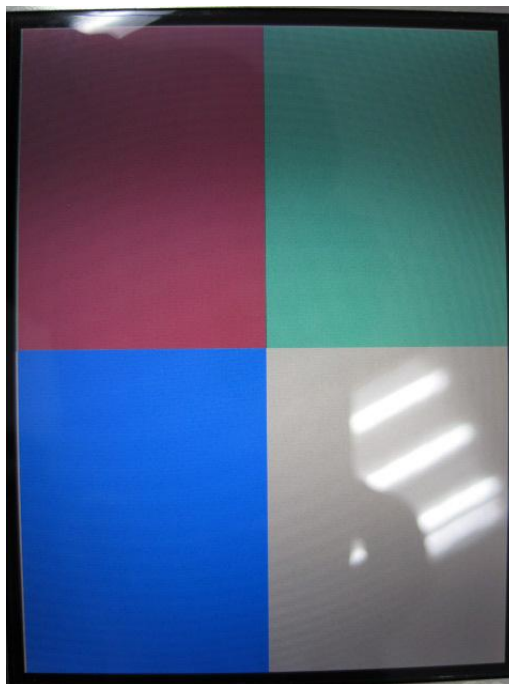


Figure 18



Figure 19

17. About 70 seconds, the screen will show an image like figure 20, and it means the flash function is finish. Please re-start TACH3.



Figure 20

18. If the screen is show an image like Figure 21, that is mean the flash function is successful.



Figure 21

19. After WinCE boot success, it will show an image like Figure 22.

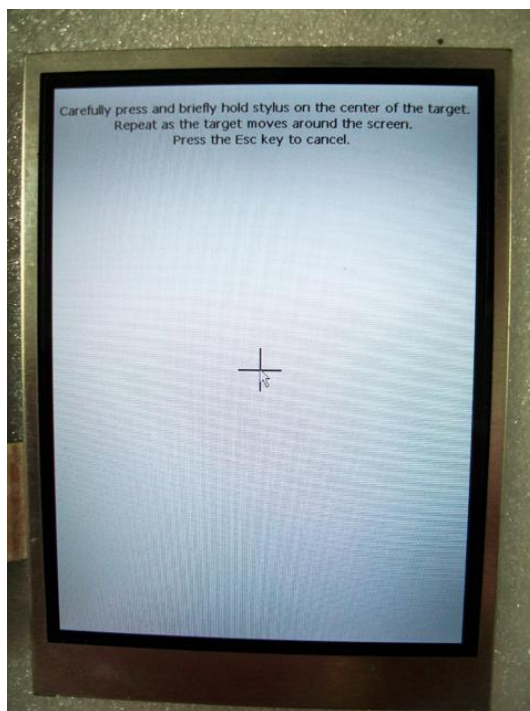


Figure 22